FIG. 1

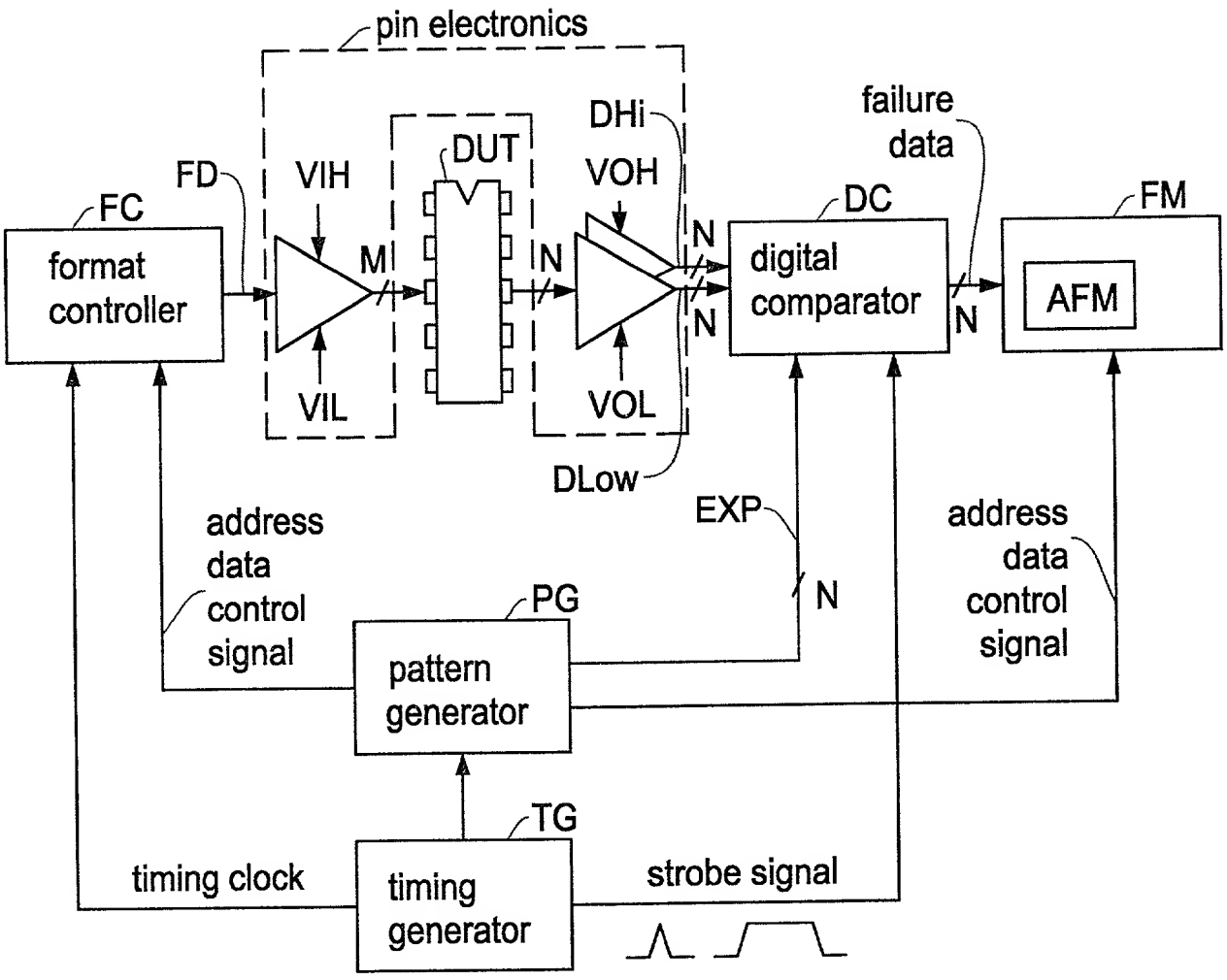

pin electronics
FC
format controller
FD
VIH
VIL
M
DUT
N
DHi
VOH
VOL
DLow
N
N
DC
digital comparator
failure data
N
FM
AFM
address data control signal
PG
pattern generator
EXP
N
address data control signal
TG
timing clock
timing generator
strobe signal

FIG. 2A

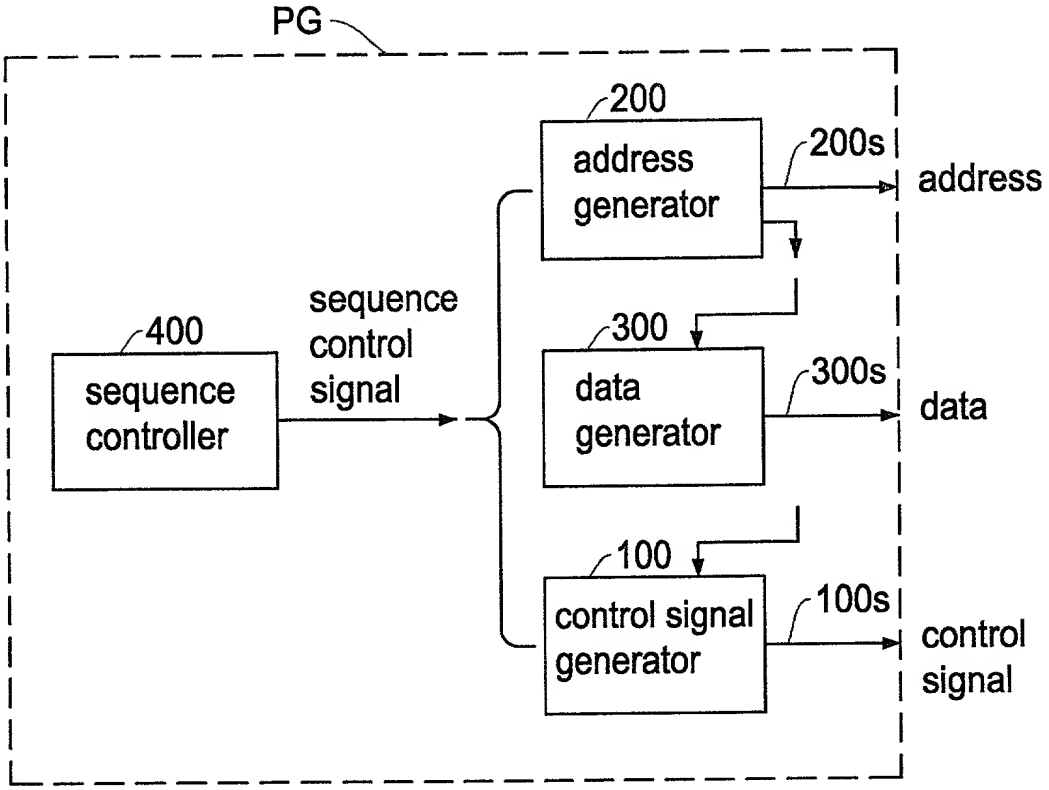

PG
200
address generator
200s
address
400
sequence controller
sequence control signal
300
data generator
300s
data
100
control signal generator
100s
control signal

FIG. 2B

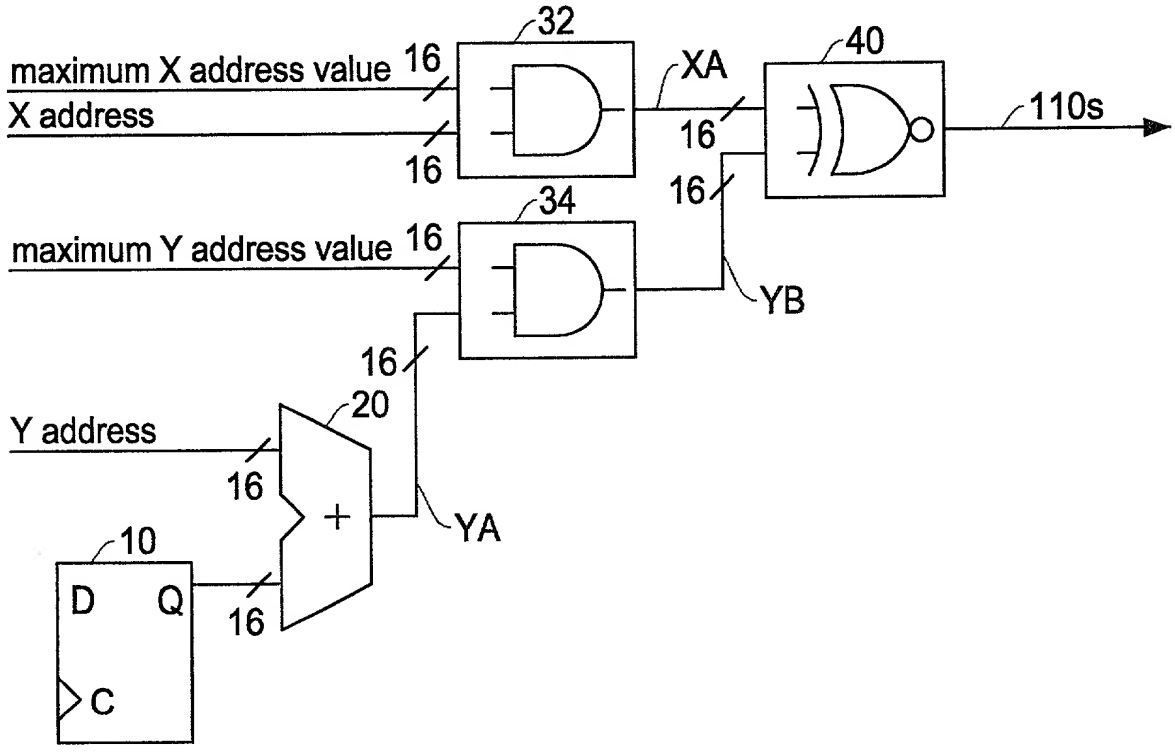

32
maximum X address value
16
X address
16
XA
40
16
110s
16
34
maximum Y address value
16
YB
16
20
Y address
16
+
YA
10
D
Q
16
C

FIG. 3A

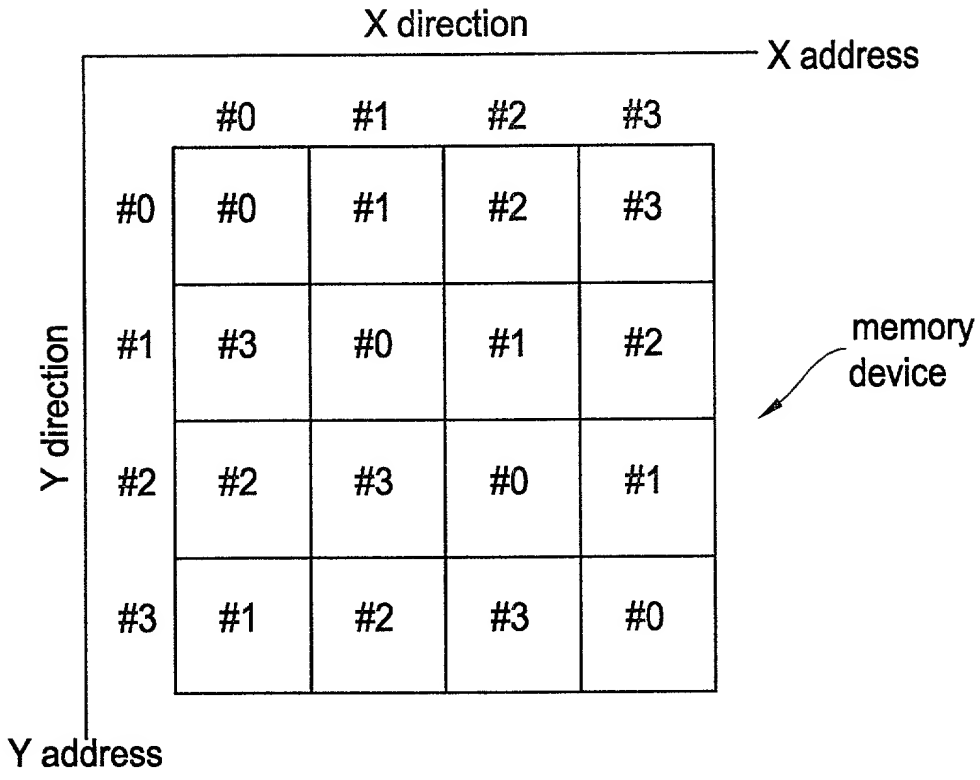

X direction
X address
#0
#1
#2
#3
#0
#0
#1
#2
#3
#1
#3
#0
#1
#2
#2
#2
#3
#0
#1
#3
#1
#2
#3
#0
Y direction
Y address
memory device

FIG. 3B

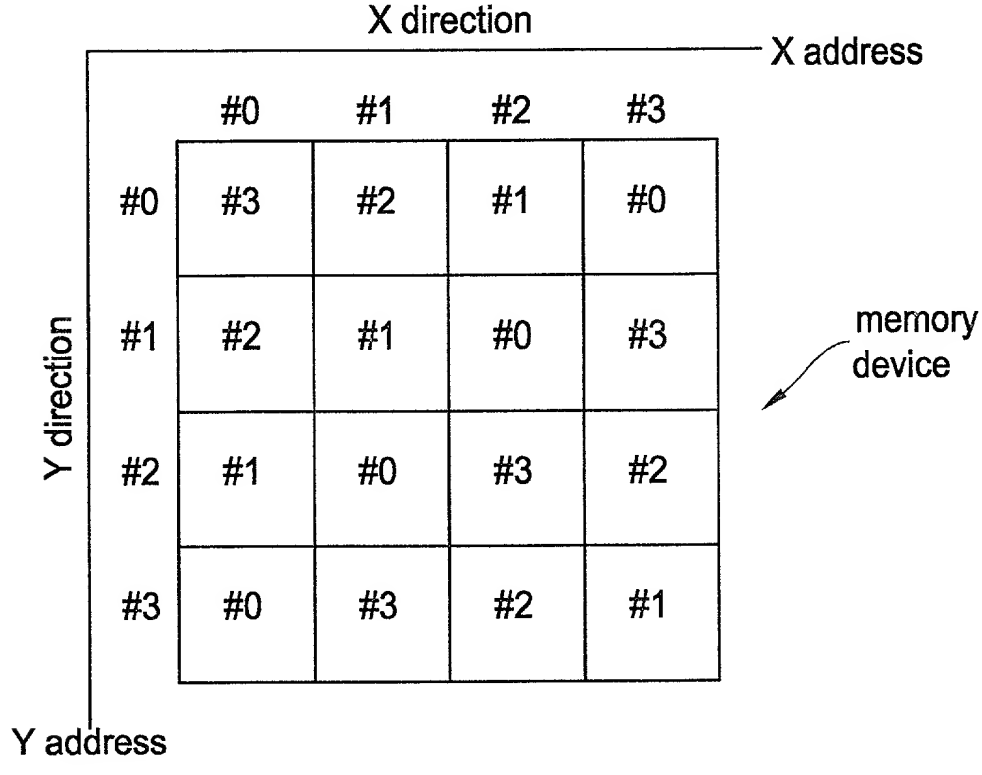

X direction
X address
#0
#1
#2
#3
#0
#3
#2
#1
#0
#1
#2
#1
#0
#3
#2
#1
#0
#3
#2
#3
#0
#3
#2
#1
Y direction
Y address
memory device

FIG. 4

max. X address value = #3
max. Y address value = #3
diagonal inversion set value = #3

X address of memory cell	#0	#1	#2	#3
X address of memory cell & maximum X address value	#0	#1	#2	#3

Y address of memory cell	Y address of memory cell + diagonal inversion set value & maximum Y address value
#0	#3
#1	#0
#2	#1
#3	#2

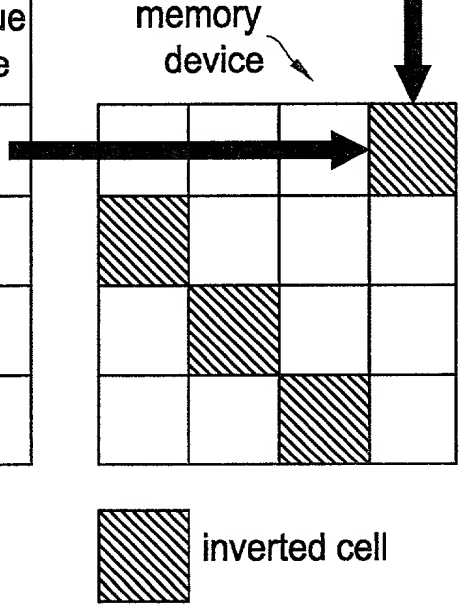


FIG. 5

max. X address value = #7
max. Y address value = #3
diagonal inversion set value = #3

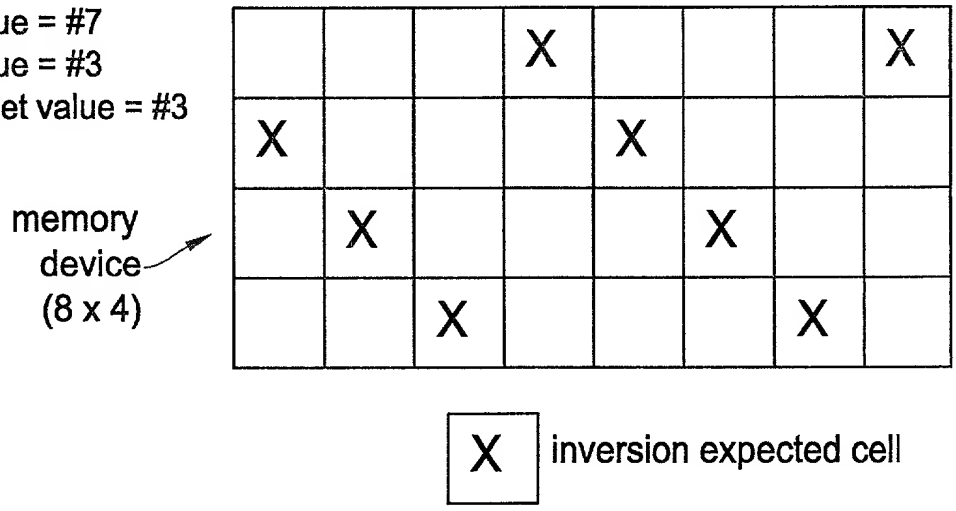
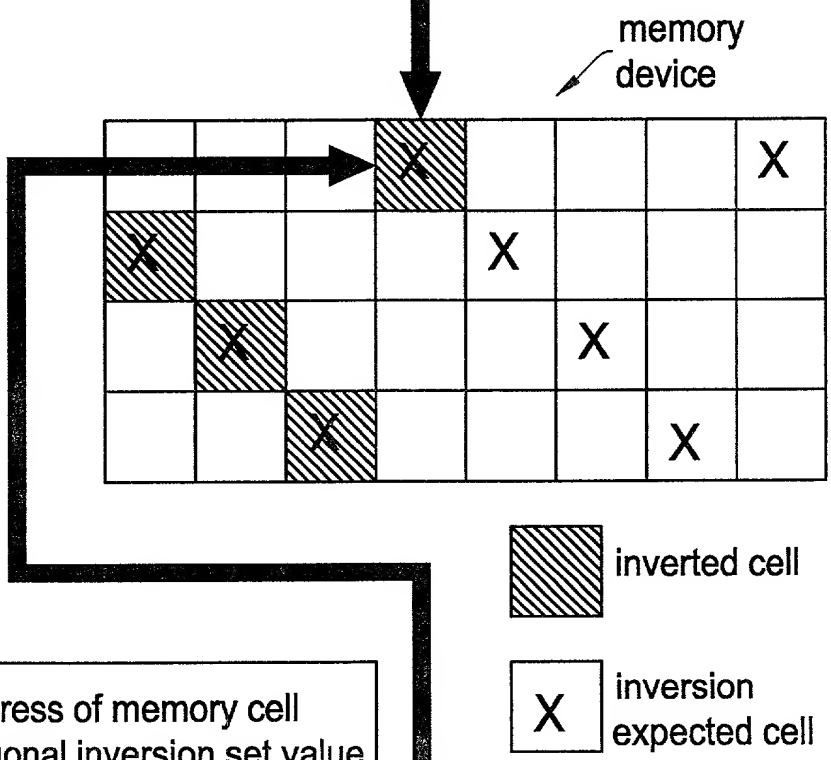


FIG. 6

max. X address value = #7
max. Y address value = #3
diagonal inversion set value = #3

X address of memory cell	#0	#1	#2	#3	#4	#5	#6	#7
X address of memory cell & maximum X address value	#0	#1	#2	#3	#4	#5	#6	#7



Y address of memory cell	Y address of memory cell + diagonal inversion set value & maximum Y address value
#0	#3
#1	#0
#2	#1
#3	#2

FIG. 7

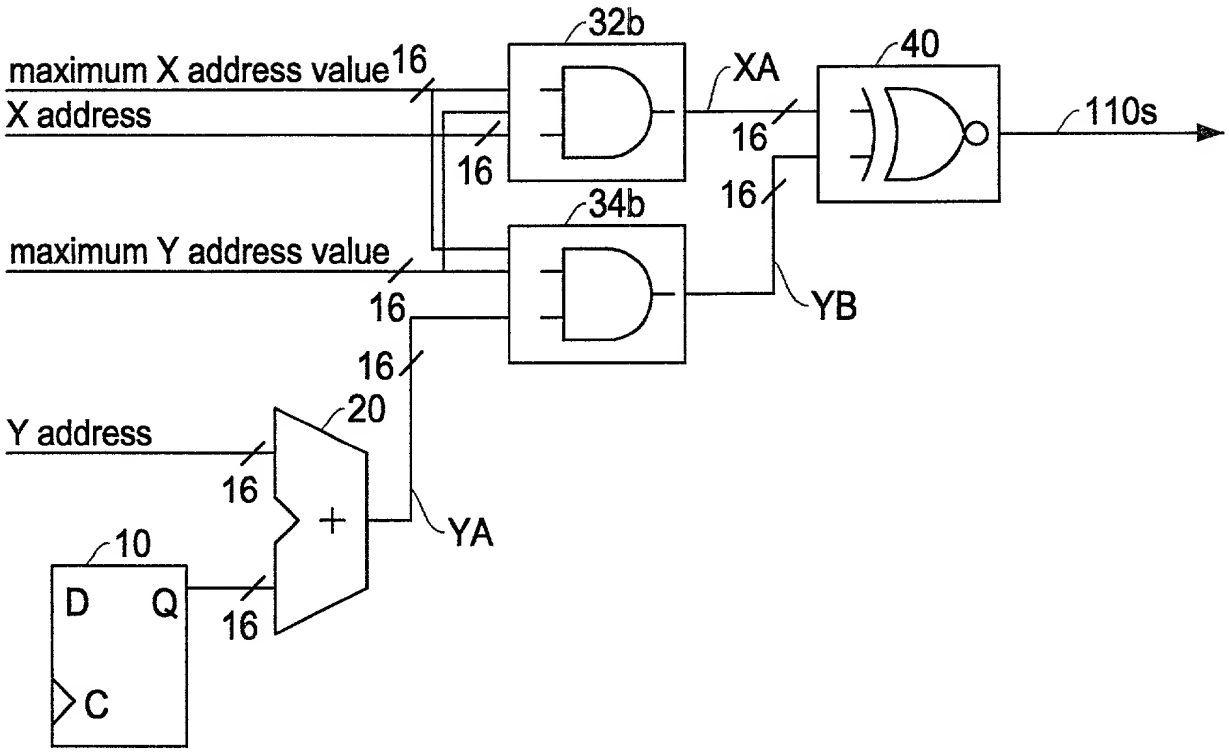
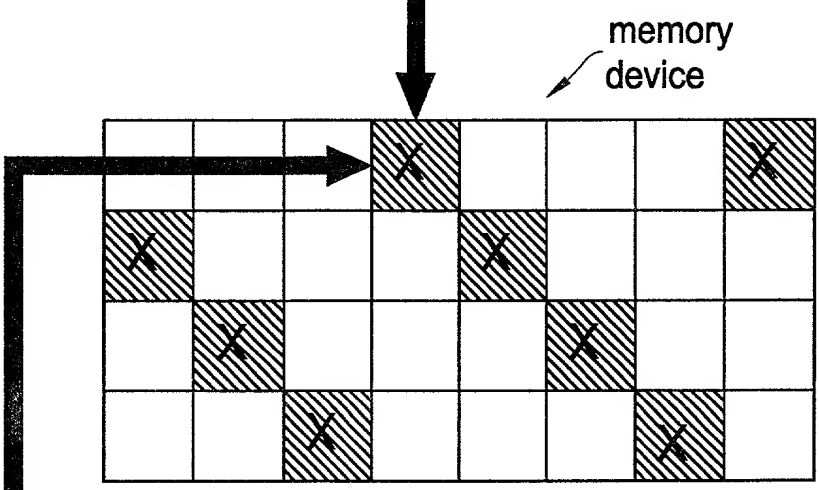

maximum X address value
16
X address
16
32b
XA
16
40
110s
16
maximum Y address value
34b
16
YB
16
20
Y address
16
+
YA
10
D
Q
16
C

FIG. 8

max. X address value = #7
max. Y address value = #3
diagonal inversion set value = #3

X address of memory cell	#0	#1	#2	#3	#4	#5	#6	#7
X address of memory cell & maximum X address value	#0	#1	#2	#3	#0	#1	#2	#3



Y address of memory cell	Y address of memory cell + diagonal inversion set value & maximum Y address value
#0	#3
#1	#0
#2	#1
#3	#2